RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/648.36/A
Source:	1FW/6,
Date Processed by STIC:	7/6/06
	- '/ /

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 07/06/2006
PATENT APPLICATION: US/10/648,361A TIME: 17:28:24

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

```
3 <110> APPLICANT: SAARMA, Mart et al.
 5 <120> TITLE OF INVENTION: NOVEL NEUROTROPHIC FACTOR PROTEIN AND USES THEREOF
 7 <130> FILE REFERENCE: 0933-0210P
 9 <140> CURRENT APPLICATION NUMBER: US 10/648,361A
10 <141> CURRENT FILING DATE: 2003-08-27
12 <150> PRIOR APPLICATION NUMBER: US 60/406,927
13 <151> PRIOR FILING DATE: 2002-08-30
15 <160> NUMBER OF SEQ ID NOS: 22
17 <170> SOFTWARE: PatentIn version 3.2
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 564
21 <212> TYPE: DNA
22 <213> ORGANISM: Homo sapiens
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (1)..(564)
28 <400> SEQUENCE: 1
29 atg tgg tgc gcg agc cca gtt gct gtg gtg gcc ttt tgc gcc ggg ctt
30 Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu
33 ttg gtc tct cac ccg gtg ctg acg cag ggc cag gag gcc ggg ggg cgg
34 Leu Val Ser His Pro Val Leu Thr Gln Gly Gln Glu Ala Gly Gly Arq
                                    25
37 cca ggg.gcc gac tgt gaa gta tgt aaa gaa ttc ttg aac cga ttc tac
                                                                      144
38 Pro Gly Ala Asp Cys Glu Val Cys Lys Glu Phe Leu Asn Arg Phe Tyr
41 aag tca ctg ata gac aga gga gtt aac ttt tcg ctg gac act ata gag
                                                                      192
42 Lys Ser Leu Ile Asp Arg Gly Val Asn Phe Ser Leu Asp Thr Ile Glu
                            55
45 aaa gaa ttg atc agt ttt tgc ttg gac acc aaa gga aaa gaa aac cgc
                                                                      240
46 Lys Glu Leu Ile Ser Phe Cys Leu Asp Thr Lys Gly Lys Glu Asn Arg
47 65
                        70
49 ctg tgc tat tat cta gga gcc aca aaa gac gca gcc aca aag atc cta
50 Leu Cys Tyr Tyr Leu Gly Ala Thr Lys Asp Ala Ala Thr Lys Ile Leu
                    85
53 agt gaa gtc act cgc cca atg agt gtg cat atg cct gca atg aag att
54 Ser Glu Val Thr Arg Pro Met Ser Val His Met Pro Ala Met Lys Ile
55
               100
                                   105
57 tgt gag aag ctg aag aag ttg gat agc cag atc tgt gag ctg aaa tat
58 Cys Glu Lys Leu Lys Leu Asp Ser Gln Ile Cys Glu Leu Lys Tyr
                               120
61 gaa aaa aca ctg gac ttg gca tca gtt gac ctg cgq aaq atq aqa qtq
62 Glu Lys Thr Leu Asp Leu Ala Ser Val Asp Leu Arg Lys Met Arg Val
```

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

63 130 135 65 gca gag ctg aag cag atc ctg cat agc tgg ggg gag gag tgc agg gcc 66 Ala Glu Leu Lys Gln Ile Leu His Ser Trp Gly Glu Glu Cys Arg Ala 67 145 150 69 tgt gca gaa aaa act gac tat gtg aat ctc att caa gag ctg gcc ccc 528 70 Cys Ala Glu Lys Thr Asp Tyr Val Asn Leu Ile Gln Glu Leu Ala Pro 165 170 73 aag tat gca gcg aca cac ccc aaa aca gag ctc tga 564 74 Lys Tyr Ala Ala Thr His Pro Lys Thr Glu Leu 180 78 <210> SEQ ID NO: 2 79 <211> LENGTH: 187 80 <212> TYPE: PRT 81 <213> ORGANISM: Homo sapiens 83 <400> SEQUENCE: 2 84 Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu 5 86 Leu Val Ser His Pro Val Leu Thr Gln Gly Gln Glu Ala Gly Gly Arq 88 Pro Gly Ala Asp Cys Glu Val Cys Lys Glu Phe Leu Asn Arg Phe Tyr 90 Lys Ser Leu Ile Asp Arg Gly Val Asn Phe Ser Leu Asp Thr Ile Glu 92 Lys Glu Leu Ile Ser Phe Cys Leu Asp Thr Lys Gly Lys Glu Asn Arg 70 94 Leu Cys Tyr Tyr Leu Gly Ala Thr Lys Asp Ala Ala Thr Lys Ile Leu 85 90 96 Ser Glu Val Thr Arg Pro Met Ser Val His Met Pro Ala Met Lys Ile 100 . 105 98 Cys Glu Lys Leu Lys Leu Asp Ser Gln Ile Cys Glu Leu Lys Tyr 115 120 100 Glu Lys Thr Leu Asp Leu Ala Ser Val Asp Leu Arg Lys Met Arg Val 102 Ala Glu Leu Lys Gln Ile Leu His Ser Trp Gly Glu Glu Cys Arg Ala 103 145 150 155 104 Cys Ala Glu Lys Thr Asp Tyr Val Asn Leu Ile Gln Glu Leu Ala Pro 165 106 Lys Tyr Ala Ala Thr His Pro Lys Thr Glu Leu 107 180 185 111 <210> SEQ ID NO: 3 112 <211> LENGTH: 564 113 <212> TYPE: DNA 114 <213> ORGANISM: Mus musculus 116 <220> FEATURE: 117 <221> NAME/KEY: CDS 118 <222> LOCATION: (1)..(564) 120 <400> SEQUENCE: 3 121 atg cgg tgc atc agt cca act gct ctg gtg acc ttt tgc gcc ggg ttt 122 Met Arg Cys Ile Ser Pro Thr Ala Leu Val Thr Phe Cys Ala Gly Phe

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

122	-				_					10					1.5		
123	1		.		5					10	_4				15		0.6
						gtg											96
	Cys	TTE	ser		Pro	Val	Leu	Ата		GIY	ьeu	GIu	Ala		vai	GIY	
127				20					25					30			
						gaa											144
	Pro	Arg		Asp	Cys	Glu	Val		Lys	Glu	Phe	Leu	Asp	Arg	Phe	\mathtt{Tyr}	
131			35					40					45				
						aga											192
134	Asn	Ser	Leu	Leu	Ser	Arg	Gly	Ile	Asp	Phe	Ser	Ala	Asp	Thr	Ile	Glu	
135		50					55					60					
137	aaa	gag	ctg	ctc	aac	ttt	tgc	tca	gat	gcc	aaa	gga	aaa	gaa	aac	cgc	240
138	Lys	Glu	Leu	Leu	Asn	Phe	Cys	Ser	Asp	Ala	Lys	Gly	Lys	Glu	Asn	Arg	
139	65					70					75					80	
141	ctg	tgc	tat	tat	ctg	999	gcc	acc	aca	gat	gca	gcc	acc	aag	atc	cta	288
						Gly											
143		-	-	•	85	-				90				•	95		
145	qqa	qaa	qtc	act	cat	ccc	atq	agt	qta	cac	ata	cct	acc	ata	aaq	att	336
						Pro	_	_	_				_		_		
147	2			100	5				105					110	-1 -		
	tat	gag	aag		aaσ	aag	atσ	gac	-	cag	atc	tat	gag		aaa	tac	384
						Lys											501
151	-7-		115		-70			120	001	V		0,0	125		_,,	-1-	
	aaa	aaq		cta	gac	ttg	aca		ata	gac	cta	taa		ato	aga	ata	432
						Leu											732
155	U -7	130	_,,,	шец	21.00	L Cu	135	DCI	Val	nop	шси	140	Lys	I-IC C	A. 9	vai	
	aca		cta	224	cac	atc		cac	202	taa	~~~		a=a	taa	200	<i>aa</i> ₂	480
						Ile											400
	145	GIU	пец	цуз	GIII	150	пец	GIII	Arg	пр	155	GIU	Giu	Cys	Arg		
	_	aaa	~~~	222	2 ~ +		+	~+~	224	ata		200	~~~	a+ ~	~~~	160	E20
						gac											528
163	Cys	AIA	GIU	цуб		Asp	TÄT	val	ASII		TTE	Arg	GIU	ьeu		PIO	
					165					170					175		564
						tac						tga					564
	ьys	ıyı	val		тте	Tyr	Pro	GIN		GIU	ьeu						
167	.01/		- T	180					185								
)> SI															
		L> LI			3 /												
		2> T)					,										
						musc	curus	3									
)> SI				_			_	-			_	_ •			
		Arg	Cys	Ile	Ser	Pro	Thr	Ala	Leu		Thr	Phe	Cys	Ala	_	Phe	
177	1				5					10					15		
	Cys	Ile	Ser	Asn	Pro	Val	Leu	Ala	Gln	Gly	Leu	Glu	Ala	Gly	Val	Gly	
179				20					25					30			
	Pro	Arg	Ala	Asp	Cys	Glu	Val	Cys	Lys	Glu	Phe	Leu	Asp	Arg	Phe	Tyr	
181			35					40					45				
182	Asn	Ser	Leu	Leu	Ser	Arg	Gly	Ile	Asp	Phe	Ser	Ala	Asp	Thr	Ile	Glu	
183		50					55					60					
184	Lys	Glu	Leu	Leu	Asn	Phe	Cys	Ser	Asp	Ala	Lys	Gly	Lys	Glu	Asn	Arg	
185	65					70					75					80	

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

186 Leu Cys Tyr Tyr Leu Gly Ala Thr Thr Asp Ala Ala Thr Lys Ile Leu 187 90 188 Gly Glu Val Thr Arg Pro Met Ser Val His Ile Pro Ala Val Lys Ile 189 100 105 190 Cys Glu Lys Leu Lys Lys Met Asp Ser Gln Ile Cys Glu Leu Lys Tyr 115 120 125 192 Gly Lys Lys Leu Asp Leu Ala Ser Val Asp Leu Trp Lys Met Arg Val 130 135 194 Ala Glu Leu Lys Gln Ile Leu Gln Arg Trp Gly Glu Glu Cys Arg Ala 195 145 150 196 Cys Ala Glu Lys Ser Asp Tyr Val Asn Leu Ile Arg Glu Leu Ala Pro 197 165 170 198 Lys Tyr Val Glu Ile Tyr Pro Gln Thr Glu Leu 199 180 202 <210> SEQ ID NO: 5 203 <211> LENGTH: 26 204 <212> TYPE: DNA 205 <213> ORGANISM: Artificial Sequence 207 <220> FEATURE: 208 <223> OTHER INFORMATION: Description of Artificial Sequence: 209 Oligonucleotide primer 211 <400> SEQUENCE: 5 212 accatgcggt gcatcagtcc aactgc 26 215 <210> SEQ ID NO: 6 216 <211> LENGTH: 23 217 <212> TYPE: DNA 218 <213 > ORGANISM: Artificial Sequence 220 <220> FEATURE: 221 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 224 <400> SEQUENCE: 6 225 ctcatgggac gagtgacttc tcc 23 228 <210> SEQ ID NO: 7 229 <211> LENGTH: 26 230 <212> TYPE: DNA 231 <213> ORGANISM: Artificial Sequence 233 <220> FEATURE: 234 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 235 237 <400> SEQUENCE: 7 238 gtcagagctc cgtttggggg tatatc 26 241 <210> SEQ ID NO: 8 242 <211> LENGTH: 22 243 <212> TYPE: DNA 244 <213> ORGANISM: Artificial Sequence 246 <220> FEATURE: 247 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 250 <400> SEQUENCE: 8

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

251 gagctccgtt tgggggtata tc 22 254 <210> SEQ ID NO: 9 255 <211> LENGTH: 26 256 <212> TYPE: DNA 257 <213> ORGANISM: Artificial Sequence 259 <220> FEATURE: 260 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 263 <400> SEQUENCE: 9 264 accatgtggt gcgcgagccc agttgc 26 267 <210> SEQ ID NO: 10 268 <211> LENGTH: 25 269 <212> TYPE: DNA 270 <213> ORGANISM: Artificial Sequence 272 <220> FEATURE: 273 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 274 276 <400> SEQUENCE: 10 277 gcacactcat tgggcgagtg acttc 25 280 <210> SEQ ID NO: 11 281 <211> LENGTH: 27 282 <212> TYPE: DNA 283 <213> ORGANISM: Artificial Sequence 285 <220> FEATURE: 286 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide primer 287 289 <400> SEQUENCE: 11 290 gatcagagct ctgttttggg gtgtgtc 27 293 <210> SEQ ID NO: 12 294 <211> LENGTH: 22 295 <212> TYPE: DNA 296 <213> ORGANISM: Artificial Sequence 298 <220> FEATURE: 299 <223> OTHER INFORMATION: Description of Artificial Sequence: 300 Oligonucleotide primer 302 <400> SEQUENCE: 12 303 gagetetgtt ttggggtgtg te 22 306 <210> SEO ID NO: 13 307 <211> LENGTH: 179 308 <212> TYPE: PRT 309 <213> ORGANISM: Homo Sapiens 311 <400> SEQUENCE: 13 313 Met Trp Ala Thr Gln Gly Leu Ala Val Arg Val Ala Leu Ser Val Leu 317 Pro Gly Ser Arg Ala Leu Arg Pro Gly Asp Cys Glu Val Cys Ile Ser 318 25 321 Tyr Leu Gly Arg Phe Tyr Gln Asp Leu Lys Asp Arg Asp Val Thr Phe 325 Ser Pro Ala Thr Ile Glu Asn Glu Leu Ile Lys Phe Cys Arg Glu Ala

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; Xaa Pos. 123,124

VERIFICATION SUMMARY

C13

DATE: 07/06/2006

PATENT APPLICATION: US/10/648,361A

TIME: 17:28:25

Input Set : A:\2006-06-29 0933-0210P.ST25.txt
Output Set: N:\CRF4\07062006\J648361A.raw

L:543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:112